

Amendments to the Specification:

Please insert the following paragraph at page 1, line 5:

Cross-Reference to Related Applications

This application is a continuation (and claims the benefit of priority under 35 USC 120) of U.S. application serial no. 09/885,590, filed June 19, 2001, which is a continuation of U.S. application serial no. 09/577,428, filed May 22, 2000, now patent no. 6,622,053, which is a divisional of U.S. application serial no. 08/854,353, filed May 12, 1997, now patent no. 6,188,933. The disclosures of the prior applications are considered part of (and are incorporated by reference in) the disclosure of this application.

Please replace the paragraph beginning at page 7, line 15, with the following amended paragraph:

Figure 3 shows a block diagram of the system optics;
Figure 3A shows a detail of the retroreflector;
Figure 3B shows a details of the optical system;
Figure 3C shows the basic layout of the optical system;

Please replace the paragraph beginning at page 8, line 4, with the following amended paragraph:

Figure 10 shows a diagram of the wireless communication system including hand held infra red tech port commanding device;

Please replace the paragraph beginning at page 8, line 14, with the following amended paragraph:

Figure 16 shows the remoted interface board for the DMD;
Figure 17 shows the brightness profile of multiple overlapped beams.

Please replace the paragraph beginning at page 8, line 17, with the following amended paragraph:

Figure 1 shows a basic block diagram of the system of the present invention, titled the "Medusa". All operations of the system are controlled by console 100. Console 100 may be an ICON(TM) console which produces commands for lighting systems as well known in the art. Console 100 produces serial lighting control data over line 102. The data is transmitted to the stage lighting unit luminaire 104 as well as to ~~others~~ other luminaires shown as 106. There can be any number of such other lighting fixtures 106, however it is most likely that the number of such lighting fixtures be between 10 and 400. An alternative embodiment uses a DMX based control system.

Please replace the paragraph beginning at page 17, line 7, with the following amended paragraph:

Another possible DMD effect is the simulation of a beam field distribution or profile, e.g., a cosine shaped intensity profile for the spotlight. The inventors recognized that spotlights are often overlapped with other spotlights at their edges. The area of overlap can cause a bright spot at those edges. The DMD is used to form a spotlight with edge portions that have intensities that are lower than the intensity in the center of the beam. The rate of intensity drop off is

preferably a cosine function. In this way, when the two edge portions of two spotlights are placed one over the other, the overlap does not appear to be overly bright, e.g. less than 20% as shown in Figure 17. However, such variable profiles will not be desired in all situations. A variable brightness profile will not be desired in situations where multiple beams will be overlapping at their edges. However, other effects, such as illuminating a gobo, will be better illuminated using flat intensity profiles.

Please replace the paragraph beginning at page 41, line 16, with the following amended paragraph:

A driving motor 610 is also mounted on a linear bearing 612. Linear bearing 612 is substantially parallel to the linear bearing 604. The driving motor is attached to a fixed, non movable length of belt 614 which is substantially parallel to linear belt 612. Belt 614 includes teeth which positively engage with the corresponding teeth on the motor pulley. The motor is also attached to a wire loop ~~612~~ 613, which wraps around idler pulleys 625, and connects to lens mount 601.

Please replace the paragraph beginning at page 44, line 24, with the following amended paragraph:

The thus filtered and colored light is again reflected by a mirror assembly 312. The assembly can include illumination relay 311 and ~~mirror~~ 313, as shown in Figure 3B.

Please replace the paragraph beginning at page 47, line 6, with the following amended paragraph:

One important feature of the present invention is its ability to operate as a shadowless followspot. The basic characteristics of this feature are described in our co-pending application, U.S. Patent Application Serial No. 08/598,077, now U.S. Patent No. 5,828,485.

Please replace the paragraph beginning at page 47, line 15, with the following amended paragraph:

A first embodiment of the minimized parallax system uses the basic layout shown in Figure ~~3D~~ 3C. A small prism 330 is placed at an optically insensitive location between the relay lens system 320 and the zoom lens system 326. The prism 330 reflects a portion of the incoming light in a second direction 332. A CCD camera 334 is located in the path of the reflected information to receive that reflected information via focusing lens 333. Proper placement of the prism in this location allows the prism to reflect light that has a same field of view as is projected. After the zoom of the prism allows the CCD camera to receive precisely the information that is in line with the spotlight and including same field of view as the spotlight. This allows that camera to receive precisely what the DMD will project, hence reducing parallax to an almost nonexistent value.

Please replace the paragraph beginning at page 48, line 22, with the following amended paragraph:

According to the present invention, the inventors used a separate interface board for the DMD alone which has the effect of remoting the DMD relative to its interface circuitry. A

cross section of this ~~beard~~ assembly is shown in Fig 16. The DMD 1600 is shown with bottom electrical contacts 1602. These contacts are usually carefully mated to the corresponding contacts on the circuit board. However, the system of the present invention uses an elastomeric interface device 1604 to mate between the DMD and a remote card 1600. The inventors found that the use of the elastomeric interface devices facilitates the otherwise difficult DMD mounting.